Page 1 United States Environmental 1. EPA IA Identification Number 2. Funding Location by Region EPA R7 DW-96-95864601 - 0 **Protection Agency** Washington, DC 20460 UNITED STAFE 3. Other Agency IA ID Number (if known) Interagency Agreement/ 4. Awarding Office IASSC West Amendment 5. Type of Action 6. IA Specialist: Part 1 - General Information New Cathy Reese 206-553-6286 Reese.Cathy@epa.gov 7. Name and Address of EPA Organization 8. Name and Address of Other Agency US Environmental Protection Agency U.S. Army Corps of Engineers IASSC West Kansas City District Northwestern Division / 601 E 12th Street 1200 Sixth Avenue, Suite 900, OMP-173 Kansas City, MO 64106 Seattle, WA 98101 9. DUNS: 029128894 10. BETC: DISB 12. BETC: COLL 11. DUNS: DOD966419 13. Project Title and Description Westlake Landfill Construction Oversight and Technical Review The purpose of this interagency Agreement (IA) is to provide funding to the U.S. Army Corps of Engineers (USACE) to perform project planning and support technical review, and community relations for the EPA at Operable Unit 1, Area 1, 14. EPA Project Officer (Name, Address, Telephone Number) 15. Other Agency Project Officer (Name, Address, Telephone) Ina Square Marvone Seaman 11201 Renner Boulevard (SUPR/IO) Omaha District/1616 Capitol Avenue Omaha, NE 68102-9200 Lenexa, KS 66219 402-697-2425 913-551-7357 E-Malt: Square.Ina@epamail.epa gov E-Mail: Marvene.L.Seaman@usace.army.mil FAX: 402-697-2613 FAX: 913-551-7357 16. Project Period: 08/01/2014 to 12/30/2016 17. Budget Period: 08/01/2014 to 12/30/2016 18. Scope of Work (See Attachment) SCOPE OF WORK IS ATTACHED 19. Employer/Tax ID No. 520852695 20. CAGE No: 347A4 21. ALC: 68-01-0727 22. Statutory Authority for Transfer of Funds and Interagency Agreement 23. Other Agency Type CERCLA: Secs. 105(a)(4) & 115 and Executive Order 12580 Federal Agency 24. Revise Reimbursable Funds and Direct Fund Cites (only complete if applicable) This Action Amended Total Previous Funding Revise Reimbursable (in-house) ō 0 Direct Fund Cite (contractor) Total 0 Previous Amount **Amount This Action Total Amount** \$310,052 \$310,052 25. EPA Amount 26. EPA In-Kind Amount 50 \$0 SO 27. Other Agency Amount SO 28. Other Agency In-Kind Amount \$310,052 \$310,052 29. Total Project Cost 30. Fiscal Information PRC Object Class | Site/Project Cost Org | Ob/De-Ob Amt **Budget Org** Treas. Symbol DCN Appropriation 303DD2 68-68X8145 147AW94126 7AW0P 2506 0714TA00 310.052

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310.052

EPA (AG Identification No. DW-95-95864601 - 0 Page 2 Part II - Approved Budget **EPA IAG Identification Number** DW-95-95864601 - 0 31. Budget Categories Itemization of Itemization of This In-Kind Itemization of Itemization of Total All Previous Actions Action This Action Project Cost to Date (a) Personnel 5114,480 \$114,480 (b) Fringe Benefits \$58,588 568,638 (c) Travet 513,320 \$13,320 (d) Equipment Sn \$0 (e) Supplies 50 \$0 (f) Procurement / Assistance SO Sn 50 (g) Construction 50 (h) Other 50 50 (i) Total Direct Charges \$196,488 \$196,488 SO So (j) Indirect Costs: \$0 \$113,554 \$113,564 Charged - Amount Rate: 62% Base: \$183,168.00 Not Charged: Funds-Out: Not charged by Other Agency Estimate by other Agency Amount \$ (k) Total \$310 052 \$310.052 (EPA Share 100.00 %) (Other Agency Share 0.00 %) 32. How was the IDC Base calculated? Personnel costs plus fringe benefits costs-\$183.168 X 62%=\$113,564 33. Is equipment authorized to be furnished by EPA or leased, purchased, or rented with EPA lunds? Yes No (Identify all equipment costing \$1,000 or more) 34. Are any of these funds being used on Procure/Assistance agreements? Type of Procure/Assistance Agreement Contractor/Recipient Name (if Total Procure/Assistance Amount Under This Project Percent Funded by EPA (II known) known) Part III - Funding Methods and Billing Instructions (Note: EPA Agency Location Code (ALC) - 68010727) Request for repayment of actual costs must be itemized on SF 1090 and submitted to the Financial Management Office, Cincinnati, OH 45268-7002: Disbursoment Agreement Quarterly Repayment 区 Monthly Upon Completion of Work Only available for use by Federal agencies on working capital fund or with appropriate justification of need for this type of payment method. Unexpended funds at completion of work will be returned to EPA. Quarterly cost reports Advance will be forwarded to the Financial Management Center, EPA, Cincinnati, OH 45268-7002. Used to transfer obligational authority or transfer of function between Federal agencies. Must receive prior approval by the Office of Comptroller, Budget Division, Budget Formulation and Control Branch, EPA Hogirs Allocation Transfer-Out Forward appropriate reports to the Financial Reports and Analysis Branch, Financial Management Division, PM-226F, EPA, Washington, DC 20460. 36. Reimbursement Agreement Repayment Allocation Transfer-In Other Agency's Billing Address (include ALC or Station Symbol Number) Other Agency's Billing Instructions and Frequency

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EPA IAG Identification No DW-96-95864601 - 0 Page 3 **EPA Identification Number** Part IV - Acceptance Conditions DW 95-95894601 - 0 37. Terms and Conditions, when included, are located at the end of the 1610-1, or as an attachment. Part V - Offer and Acceptance Note: At For Fund out actions, the agreement/amendment must be signed by the other igency official in diplicate and one original returned to the Grants and IA Administration office within 3 calendar weeks after receipt of within any electric or the agreement/amendment must be forwarded to the address cited in item 29 after incorpting Failure to return the property executed document within the prescribed time may result in the withdrawal of offer by EPA. Any change to the agreement according to the other agency after the document is signed by the EPA Award Official, which the Award Official determines to materially after the agreement amendment, shall void the agreement/amendment B) For Fords in actions, the other agency will mitiate the action and torward two original agreements amendments to the appropriate EPA program office for signature. The agreements amendments will then be torwarded to the appropriate EPA to administration office for signature on behalf of the EPA. EPA will return one uniginal dopy after acceptance returned to the other agency after acceptance EPA IA Administration Office (for administrative assistance) EPA Program Office (for technical assistance) 38. Organization/Address 39. Organization: Address U.S. Environmental Protection Agency US Environmental Protection Agency IASSG West R7 - Region 7 (200 Sigh Avenue, Suite 900, OMP-173 11201 Renner Boulevard Seattle, WA 98101 Lenexa, KS 66219 Award Official on Behalf of the Environment Protection Agency Dale 40. Digital signature applied by EPA Award Official | Bussell Harmon - Acting Manager - Grants and Interagency Agreements Unit 07/30/2014 Authorizing Official on Behalf of the Other Agency Date Typed Name and Title Signature

Scott E. Young, Chief, Environmental Programs Branch

7-31-14

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Administrative Conditions

USACE Special Terms and Conditions - updated August 2013

The U.S. Army Corps of Engineers (USACE) agrees to meet the site-specific financial management and recordkeeping responsibilities contained in EPA's "Superfund Financial Management and Recordkeeping Guidance for Federal Agencies" (January 1989).

1. Cost Documentation Requirements

EPA, acting as manager of the Hazardous Substances Superfund, requires current information on CERCLA response actions and related obligations of CERCLA funds for these actions. In addition, CERCLA, as amended, authorizes EPA to recover from responsible parties all government costs incurred during a response action. In order to help assure oversight and successful recovery of CERCLA funds, both USACE and EPA have responsibilities under this agreement. The USACE accounting system reports must be supported by site and activity-specific cost documentation. The USACE will organize and retain in a site file documentation of costs by site and activity (e.g. vouchers, billing statements, evidence of payment, audit reports) as follows:

a. Direct Costs

- Payroll timesheets or timecards to support hours charged to a particular site, including the signature of the employee and/or the employee's supervisor.
- Travel travel authorizations (including purpose of trip), local travel vouchers, traveler's
 reimbursement vouchers, carrier bills (including airline tickets), government owned vehicle bills,
 appropriate receipts for hotel, car rental, etc., proof of payment. Proof of payment is satisfied by
 providing a copy of the accomplished Standard Form (SF) 1166 'Voucher and Schedule of
 Payment' or equivalent.
- Contractor Services copies of contracts, requests for proposals (RFPs), detailed evaluations of contractor bids, contractor invoices, USACE project officer approvals of invoices, and proof of payment. Proof of payment is satisfied by providing a copy of the accomplished SF 1166 or equivalent.
- Supplies and Equipment EPA authorizations to purchase non-expendable property of \$1,000 or more, vendor invoices, proof of payment, and hourly records of equipment use, when applicable.
- Any other direct costs not included in the above categories.

b. Indirect Costs

If indirect costs are not calculated by the USACE accounting system, a worksheet showing calculations of indirect costs charged to a site will be retained by the USACE.

Under this IA, the USACE certifies: 1) that any indirect costs included in billings to EPA represent in accordance with GAO principles, indirect costs that would not have been otherwise incurred by the USACE, or 2) that explicit Congressional authority exists for charging other than incremental costs of performance.

2. Reporting Regulrements

a. EPA regions and staff who are developing the IA should consider the anticipated project scope, schedule and costs, and discuss with the performing agency the appropriate level of detail for monthly reports, and agree on the content and format. EPA will use these reports as a tool to monitor site

activities.

b. The USACE will provide monthly progress reports to the EPA Project Officer and to the EPA Remedial Project Manager. The format and contents for monthly progress reports will follow recommendations provided in EPA's March 2008 OSRTI guidance memorandum entitled: "Monthly Project Reporting for Superfund Interagency Agreements to the U.S. Army Corps of Engineers". The monthly progress reports should minimally contain the following:

- A cover letter which includes the Site Name and IA Number.
- Summary of work performed for current period.
- Estimate of the percentage of the project completed.
- Accounting of funds expended during the reporting period and on the project to date, which
 includes budget category cost breakdown.
- Summaries of all change orders and claims made on contracts during the reporting period.
- Summaries of all contacts with representatives of the local community, public interest groups, or State government during the reporting period.
- Summaries of all problems or potential problems encountering during the reporting period .
- Projected work for the next reporting period.
- Copy of the SF 1080 billings statement clearly marked "copy".
- c. The USACE will submit a complete and signed Request for Reimbursement (SF-1080) to the EPA Financial Management Center, Cincinnati (CFMC), containing, as appropriate, USACE cost by budget category identified by site, site-specific account number, and IA number. The USACE will follow the procedures contained in EPA's OERR Directive, Memorandum 9295.2-04 entitled "EPA/U.S. Army Corps of Engineers Payment Process, Direct Cite Revised Reimbursement Methods" (available at the following website: http://www.epa.gov/superfund/cleanup/odfs/rdra/payment.pdf). Upon receipt of the USACE certified bills, CFMC processes payment to USACE. Payment will be made within 5 days of receipt and without certification by the EPA Regional Program Office except for final billings. The USACE project manager will provide one copy of the SF 1080 billings clearly marked "copy" with the monthly status report to the EPA Project Officer and one copy to the EPA Remedial Project Manager. If EPA detects any apparent discrepancies with the payment request, the problem should be discussed and resolved with the USACE Project Manager. Any changes required to subsequent payment requests will be documented in a memorandum from the EPA Project Officer to the USACE project manager.
- d. The USACE will provide a final inventory of property, within one month of the end of the Interagency Agreement performance period, describing the condition of each item. The USACE will require all contractors to provide a final inventory of property prior to their final contract payment. If the duration of the project is greater than one year, USACE will provide an annual inventory of all property acquired by or furnished to USACE with EPA funds.

3. Cost Recovery

In the event of a contemplated cost recovery action, the USACE will provide to EPA or the Department of Justice (DOJ) a cost documentation package detailing site-specific costs and including copies of the back up documentation. In some cases, these requests from EPA or DOJ may require that this documentation to provided in less than thirty days. If additional time is required to comply with a request, the USACE will negotiate with EPA or DOJ a schedule for responding. The USACE will provide EPA with a contact for obtaining necessary site-specific accounting information and documentation.

4. Cost Collection Upon Cancellation

If EPA cancels the IA, the USACE is authorized to collect costs incurred prior to cancellation of the IA plus termination costs, up to the total payment amount provided for under the agreement.

5. Record Retention Requirements

The USACE will retain the documents describe in these "Special Conditions" for a minimum of thirty years after submission of a final SF 1080 for a site or sites, after which USACE must obtain written permission from the authorized EPA official before disposing of any of the records. The USACE will require all contractors entering into cost reimbursable type contracts to establish and maintain cost documentation as described above.

6. Audits

- a. Superfund cost documentation information must be available for audit or verification upon request of authorized auditing agencies.
- b. If an audit determines that any direct or indirect costs charged to EPA by the USACE are unallowable, the USACE will notify EPA immediately following the release of the audit.

7: Final Inspection and Certification

The EPA Remedial Project Manager and Project Officer will participate in the final project inspection , as deemed necessary, to ensure all activities identified in the statement of work have been implemented . At project completion, the EPA Remedial Project Manager and Project Officer will review the final monthly and financial reports provided by the performing agency. If appropriate, EPA will initiate the IA closeout process.

8. Financial Closeout

Within six months after completion of the projects/activities, the USACE will send a letter to EPA Regional IA Coordinator stating that the project has been completed and give the total amount of funds utilized and the amount of excess funds to be deobligated and returned to EPA.

9 Other EPA Involvement

- a. If the Direct Fund Cite Method applies, payment by EPA to USACE contractors is contingent upon receipt of a USACE certified payment request. Reimbursement to USACE for in-house costs is contingent upon receipt of a USACE certified reimbursement request (SF 1080).
- b. If the Direct Fund Cite Method does <u>not</u> apply, reimbursement to USACE for all costs (contract and in-house) is contingent upon receipt of a USACE certified reimbursement request (SF 1080).
- c. Final project payments for specific contracts and in -house cost should be reviewed and approved by the EPA Regional Program Office.

10. Procurement

If this IA includes assisted acquisitions, EPA will coordinate with the performing agency prior to issuance of a contract solicitation, request for proposals under an existing contract or issuing a task order under an existing contract, to ensure that any applicable agency-specific terms and conditions are incorporated into the contract and that the statement of work is within the scope of this IA.

11. Equipment Disposition

EPA will hold title to all property acquired with Superfund monies. EPA will provide the USACE with property disposition instructions upon termination of the IA and receive fair-market value for any property disposed of or used for non-Superfund activities.

12. Minority Business Utilization

In accordance with Public Law 102-389, EPA's policy requires, to the fullest extent possible, that at least 8% of its overall Federal funding for prime and subcontracts awarded in support of authorized programs be awarded to business concerns or other organizations owned or controlled by socially and economically disadvantaged individuals, including historically Black colleges and universities and women. In accordance with CERCLA, as amended (P.L. 99-499), Section 105, any Federal agency awarding contracts, grants, or cooperative agreements utilizing Superfund monies shall consider the availability of minority contractors for participation in contracts. This includes but is not limited to contracts, subcontracts, SBA 8(a) awards and any subagreements.

Consistent with the above statutes and policy, the USACE agrees, in awarding contracts under this IA, to comply with the utilization requirements for Minority Business Enterprises (MBEs) and Women's Business Enterprises (WBEs) set forth. USACE also agrees to comply with the Small Business Act, 15 U.S.C. 631 et seq and the annual Small Business goals it negotiated with the Small Business Administration (SBA).

All reporting on MBE/WBE and small business accomplishments will be accomplished through the existing federal contracting reporting mechanism, currently the "Federal Procurement Data System, Next Generation (FPDS-NG)," which is available at: https://www.lpds.gov/fpdsng cms/.

13. Project Specific Conditions

- a. The USACE will invite (with reasonable notice) the EPA RPM to participate in contractor meetings in which scope of the project and/or progress is discussed.
- b. The USACE will invite the EPA RPM to participate in the contractor selection process, as appropriate.
- c. The USACE will have final authority for contract bids, shop drawings and contract modifications that may occur/be prepared during the course of the contract (within contingency fund limitations).
- d. The USACE Project Manager will regularly brief the EPA RPM on the current status of the project. Briefings will be monthly unless a different frequency is mutually agreed upon by both project managers. Emphasis will be placed on project budget, expenditure rates, and schedule.
- e. The USACE personnel and its contractors will have the appropriate safety training and be involved as appropriate in a medical monitoring program as specified in 29 CFR Part 1910; 51 CFR 45663 45675; and Section 125(e) of CERCLA, as amended.
- f. All project deliverables will be reviewed by appropriate USACE and EPA personnel within 30 days unless a different frequency is mutually agreed upon by both USACE and EPA Project Managers. Shortened time frames may be appropriate in cases of expedited schedules.
- g. Upon request, the USACE will, in a timely manner, submit to the EPA RPM all final negotiated contracts and contract modifications with budget information.
- h. Under situations where private contractors or subcontractors who are attempting to contract or are under contract with USACE under this IA have claimed some information as Confidential Business Information (CBI), USACE will ensure that such private contractors or subcontractors mark the information as CBI or similar claim of confidentially. The USACE will then inform EPA immediately in writing when such a claim has been received, and forward the information marked CBI to EPA for EPA review. EPA's Office of General Counsel or Office of Regional Counsel will then decide whether the CBI claim is valid. If EPA determines that the information is CBI, USACE and EPA cannot release that information under the

Freedom of Information Act (FOIA). If USACE or EPA did not ask the private contractors or subcontractors to identify CBI in its document submittals, and there is a FOIA request, USACE or EPA will have to go back to the private contractors or subcontractors and ask them to identify any CBI. If any questions arise regarding whether or not information is releasable under FOIA, USACE and EPA staff should request that the EPA Project Officer managing the IA contact EPA's Office of General Counsel or Office of Regional Counsel, or the local EPA FOIA Officer, for assistance.

 If the EPA Project Officer changes during the period of performance of the IA, EPA should submit an IA Amendment Form as soon as the change occurs.

j. On an annual basis, EPA will conduct a performance feedback survey, fully coordinated with EPA, to assess work assigned to USACE through the IA during the calendar year. The purpose of this feedback survey is to assess the performance of USACE in carrying out assigned Superfund work during the calendar year. The survey includes survey questions that would be filled out by the RPM regarding USACE performance under the IA. For any sites where an RPM provides a low rating of '1' or '2' for any response to this feedback survey, USACE Headquarters will request that the USACE Project Manager contact the RPM to discuss the reasons for that rating and work out how to best resolve the problems or issues raised by the RPM.

14. Resolution of Disagreements

Should disagreements arise on the interpretation of the provisions of this agreement or amendments and/or revisions thereto, that cannot be resolved at the operating level, the area(s) of disagreement shall be stated in writing by each party and presented to the other party for consideration. If agreement or interpretation is not reached within 30 days, the parties shall forward the written presentation of the disagreement to respective higher officials for appropriate resolution.

If a dispute related to funding remains unresolved for more than 30 calendar days after the parties have engaged in an escalation of the dispute, disputes will be resolved in accordance with instructions provided in the Treasury Financial Manual (TFM) Volume I. Part 2, Chapter 4700, Appendix 10, available at http://www.fins.treas.gov/tfm/index.html.

If USACE and EPA cannot concur nor conditionally concur regarding any aspect of work associated with EPA and USACE activities under this IA, such disputes shall be resolved at the lowest level possible within EPA and USACE. In such instances, USACE district or division staff may sequentially elevate the matter to the Commander of the USACE district or division office that is managing the IA for resolution, and EPA regional or headquarters staff may sequentially elevate the matter to the Director of EPA's Superfund or Waste Management Division with the EPA regional or headquarters office that is managing the IA for resolution.

15. Quality Assurance

If this IA involves the collection, generation, or use of environmental data or information, then a Quality Management Plan (QMP) and a Quality Assurance Project Plan (QAPP) must be developed and used in accordance with existing Regional and National Program Office QA policies, guidelines, SOPs, etc. Within these broad QM/QA guidelines, specific requirements for a given project will be detailed in the Statement of Work (SOW) as an attachment to each IA. If mutually agreed, QMPs may address multiple projects and be submitted periodically, rather than project specifically. The USACE is responsible for reviewing and approving any contractor work for consistency with these QA requirements. Any guidance referenced herein will be superseded by updates or new Requirements/Guidance as they become available. EPA may perform periodic Quality System and/or project-related assessments. The most recent QMP and QAPP Guidance and Requirements can be found at:

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16. Sufficient Progress

EPA expressly reserves the right to terminate the IA for failure to make sufficient progress so as to reasonably ensure completion of the project within the project period, including any extensions. EPA will measure sufficient progress by examining the performance required under the Statement of Work, the time remaining for performance, and/or the availability of funds necessary to complete performance. In exercising this right to terminate, EPA will follow the procedures for terminating the IA in Terms and Conditions.

17. Restrictions on FY 12 and Later Funding for Corporations with Unpaid Federal Tax Liabilities and Felony Convictions (for funds-out awards with funds in procurement /assistance) (updated 10/30/2013)

This interagency agreement (IA) obligates and transfers or advances EPA funds appropriated under Public Law 113-46 (Continuing Appropriations Act, 2014), Public Law 113-6 (Department of Defense, Military Construction and Veterans Affairs, and Full-Year Continuing Appropriations Act, 2013) and Public Law 112-175 (Continuing Appropriations Resolution, 2013) which continues provisions contained in the Department of Interior, Environment, and Related Agencies Appropriations Act, 2012, Public Law 112-74 (FY12 Appropriations Act), Division E, Title IV, Sections 433 and 434. As a result, this IA is subject to the provisions of Division E, Sections 433 and 434 of the Appropriations Act, regarding federal felony convictions and unpaid federal tax liabilities. Specifically,

Section 433 provides:

None of the funds made available by this Act [FY12 Appropriations Act] may be used to enter into a contract, memorandum of understanding, or cooperative agreement with, make a grant to, or provide a loan or loan guarantee to, any corporation that was convicted (or had an officer or agent of such corporation acting on behalf of the corporation convicted) of a felony criminal violation under any Federal law within the preceding 24 months, where the awarding agency is aware of the conviction, unless the agency has considered suspension or debarment of the corporation, or such officer or agent, and made a determination that this further action is not necessary to protect the interests of the Government.

Section 434 of Division E of the Appropriations Act further provides:

None of the funds made available by this Act [FY12 Appropriations Act] may be used to enter into a contract, memorandum of understanding, or cooperative agreement with, make a grant to, or provide a loan or loan guarantee to, any corporation with respect to which any unpaid Federal tax liability that has been assessed, for which all judicial and administrative remedies have been exhausted or have lapsed, and that is not being paid in a timely manner pursuant to an agreement with the authority responsible for collecting the tax liability, where the awarding agency is aware of the unpaid tax liability, unless the agency has considered suspension or debarment of the corporation and made a determination that this further action is not necessary to protect the interests of the Government.

Accordingly, by accepting the award of this IA, the USACE agrees that it will comply with and implement the prohibitions of Sections 433 and 434 for any contract, assistance agreement, loan, loan guarantee or other instrument with any corporation that will be funded with funds provided under this IA.

Non-compliance with the provisions of Sections 433 and 434 may implicate the Antideficiency Act.

USACE will forward to the EPA Award Official, within 45 days, any determination and documentation supporting an award where suspension and debarment are considered by the awarding agency.

18. Inherently Governmental

In accordance with FAR 7.503(c)&(d), funding provided by EPA and placed on service contracts cannot be used for project(s) which would constitute inherently governmental functions. In addition, the USACE shall not utilize EPA funds on USACE service contracts for any contractor activities to be performed that are inherently governmental, exempt from private sector performance, or that are so closely associated as to approach inherently governmental because of the nature of the function, the manner in which the

contractor performs the contract, or the manner in which the Governmental administers contractor performance.

END OF DOCUMENT

STATEMENT OF WORK

Independent Technical Review for Operable Unit 1 at the West Lake Landfill Site

1. BACKGROUND INFORMATION

The West Lake Landfill Site is on a parcel of approximately 200 acres located in the northwestern portion of the St. Louis metropolitan area. It is situated approximately one mile north of the intersection of Interstate 70 and Interstate 270 within the limits of the city of Bridgeton in northwestern St. Louis County. The Missouri River lies about 1.5 miles to the north and west of the Site.

The Site consists of two radiologically contaminated landfill cells comprising Operable Unit 1 (OU-1) and the Bridgeton Sanitary Landfill (Former Active Sanitary Landfill) and several inactive areas with sanitary and demolition fill that have been closed comprising OU-2. Land use at the site and the surrounding areas in Earth City is industrial.

Other facilities which are not subject to this response action are located on the 200-acre parcel including concrete and asphalt batch plants, a solid waste transfer station, and an automobile repair shop.

The Site was used agriculturally until a limestone quarrying and crushing operation began in 1939. The quarrying operation continued until 1988 and resulted in two quarry pits. Beginning in the early 1950s, portions of the quarried areas and adjacent areas were used for landfilling municipal solid waste (MSW), industrial solid wastes, and construction/demolition debris. These operations were not subject to state permitting because they occurred prior to the formation of the Missouri Department of Natural Resources (MDNR) in 1974. Two landfill areas were radiologically contaminated in 1973 when they received soil mixed with leached barium sulfate residues.

The barium sulfate residues, containing traces of uranium, thorium, and their long-lived daughter products, were some of the uranium ore processing residues initially stored by the Atomic Energy Commission (AEC) on a 21.7 acre tract of land in a then undeveloped area of north St. Louis County, now known as the St. Louis Airport Site (SLAPS), which is part of the St. Louis Formerly Utilized Sites Remedial Action Program managed by the U.S. Army Corps of Engineers (USACE)

In 1966, residues associated with the production and refining of uranium materials were purchased by Continental Mining and Milling Company of Chicago, removed from the SLAPS, and placed in storage at the Hazelwood Interim Storage Site (HISS) on Latty Avenue under an AEC license. In 1967, Commercial Discount Corporation, which obtained possession of the HISS property and residuals, began drying residue and shipping them to Cotter Corporation in Canon City, Colorado (DOE 1987). In 1969,

residues remaining at the HISS were sold to Cotter Corporation in Canon City. In 1970. Cotter Corporation dried and shipped some of the remaining residues from the HISS to Canon City (DOE 1994). In December 1970, an estimated 10,000 ton of Colorado raffinate and 8,700 tons of leached barium sulfate remained at the Latty Avenue HISS.

Reportedly, 8.700 tons of leached barium sulfate residues were mixed with approximately 39.000 tons of soil and then transported to the West Lake site in 1973. According to the landfill operator, the soil was used as cover for municipal refuse in routine landfill operations.

The geology of the landfill area consists of Paleozoic-age sedimentary rocks overlying Pre-Cambrian-age igneous and metamorphic rocks. The Paleozoic bedrock is overlain by unconsolidated alluvial and loess deposits of recent (Holocene) age. Alluvial deposits of varying thickness are present beneath Areas 1 and 2. The landfill debris varies in thickness from 5 to 56 feet in Areas 1 and 2, with an average thickness of approximately 30 feet in Area 2. The underlying alluvium increases in thickness from east to west beneath Area 1. The alluvial thickness beneath the southeastern portion of Area 1 is less than 5 feet (bottom elevation of 420 ft/amsl) while the thickness along the northwestern edge of Area 1 is approximately 80 feet (bottom elevation of 370 ft/amsl). The thickness of the alluvial deposits beneath Area 2 is fairly uniform at approximately 100 feet (bottom elevations of 335 ft/amsl).

A subsurface oxidation event (SSE) is ongoing in the South Quarry Landfill portion of the Bridgeton Sanitary Landfill. The South Quarry cell is connected to the North Quarry cell which is adjacent to Operable Unit 1, Area 1, one of the locations on site that received the radiologically contaminated soils in 1973. Pursuant to an order from the Missouri Attorney General, the site owner is required to install a subsurface barrier between the North Quarry cell and OU-1 Area 1 to prevent the SSE from migrating into the radiologically contaminated materials.

As a follow-up to EPA.R7 consultation with EPA's National Remedy Review Board (NRRB) in February 2012, the following evaluations are being conducted to assess the Remedial Alternatives for OU-1: 1) partial excavation evaluation; 2) alternative landfill cap designs; 3) evaluation on the use of waste treatment technologies, including apatite; 4) recalculation of RIM volumes for a full excavation scenario; 5) groundwater fate and transport modeling; and 6) recalculation of discount rate. These evaluations will be contained in a forthcoming Supplemental Feasibility Study (SSFS) Amendment or equivalent document.

II. OBJECTIVE AND SCOPE

This will be an interagency agreement. The EPA is requesting assistance from the US Army Corps of Engineers (USACE) to conduct an Independent Technical Review (ITR) of specific documents associated with Operable Unit-1 at the West Lake Landfill and being developed in response to National Remedy Review Board (NRRB) comments.

The technical support may consist of performance of specific tasks which USEPA contractors have neither the expertise or cannot provide at reasonable cost to FPA.

III. WORK ASSIGNMENT TASKS

USACE shall furnish personnel and services required to conduct an ITR of reports prepared by the Responsible Parties in response to the recommended NRRB evaluation.

Tasks included in this scope are:

- 1. Project Planning and Support
- 2. Independent Technical Reviews
- 3. Community Relations Support
- 4. Close-Out

TASK 1 PROJECT PLANNING AND SUPPORT

This task includes work efforts related to project initiation, management, and support. Activities required under this task include the following, as applicable:

- 1.1 USACE shall participate in a scoping meeting with EPA to discuss the work assignment.
- 1.2 USACE shall provide proposed level of effort and costs for the support activities to be performed. Based on EPA's review of the scope, level of effort and cost estimate, USACE may be called upon to participate in negotiations with EPA on the proposed level of effort and to revise the level of effort as a result of these negotiations.
- 1.3 The USACE shall perform site-specific project management including:
 - 1.3.1 Establishment and maintenance of necessary work assignment files, schedules, and project documentation
 - 1.3.2 Provide monthly reporting and invoices. These documents shall contain narrative of specific task and subtask activities sufficient enough for the

- EPA Remedial Project Manager (RPM) to evaluate the work assignment progress.
- 1.3.3 Monitor costs and performance
- 1.3.4 Coordinate staffing and other support activities to perform the work assignment tasks in accordance with the Statement of Work (SOW) including USACE subcontractors, if utilized.
- 1.3.5 Attend necessary work assignment meetings
- 1.3 The USACE shall accommodate any external audit or review mechanism that EPA may require. Level of effort for this work will be determined at a later date and this IA will be amended to include this task and associated cost.

TASK 2 INDEPENDENT TECHNICAL REVIEWS

This task includes the work required to conduct the ITR and documents the required deliverables.

- 2.1 USACE shall coordinate and prepare a review plan and assist EPA in preparing the reviewer's charge statement.
- 2.2 USACE shall perform an ITR of reports prepared by the Responsible Parties (RPs) in response to the NRRB consultation with EPA on the Supplemental Feasibility Study dated December 28, 2011. The purpose of the ITR is to provide an independent assessment of the RP's work products to ensure the scientific and technical components have been applied in a sound manner to meet established regulatory requirements. The ITR will be conducted by qualified individuals who are independent of those who performed the work, and who are collectively equivalent in technical expertise (i.e., peers) to those who prepared the reports.

The reports prepared in response to the NRBB recommendations will include:

- 2.2.1 Up to four ITR reports to address the following:
 - The RP's evaluation of a partial excavation alternative:
 - The RP's recalculation of RIM volumes to address alternate excavation scenario;
 - The RP's evaluation of up to three alternative landfill cap designs:
 - The RP's evaluation on the use of up to five waste treatment technologies, including apatite and soil sorting:
 - The RP's results of groundwater fate and transport modeling; and
 - The RP's recalculation of all alternatives using a 7% discount rate.
- 2.2.2. A Supplemental Feasibility Study Addendum or equivalent document.

- 2.2.3 A Revised Proposed Plan, if required. If a Revised Proposed Plan is required, the level of effort for the ITR will be determined at a later date and this IA will be amended to include this task and associated cost.
- 2.2.4 An Amended ROD, if required. If a Revised ROD is required, the level of effort for the ITR will be determined at a later date and this IA will be amended to include this task and associated cost.
- 2.3 USACE ITR team will review historical documents for familiarity and understanding of the site. Historical documents will not be the subject of the ITR. Historical documents to be reviewed include, but may not be limited to the following:
 - OU1 Site Characterization Summary Report
 - OU1 Rémedial Investigation Report
 - OUI Baseline Risk Assessment
 - OU1 Feasibility Study
 - OU1 Supplemental Feasibility Study
 - OUT Record of Decision
 - EPA Radiological and Infrared Survey Report (ASPECT) (May 2013)
 - MDNR Radiological Survey Report (May 2013)
 - Radiation Management Corporation Radiological Survey (1982)
 - NRC Radioactive Material in West Lake Landfill (1988)
- 2.4 USACE shall prepare an ITR report for each of the documents reviewed. The letter report will contain USACE's technical evaluation and, to the extent practicable, shall be written in terms understood by the general public. The letter report will be submitted to EPA as a "final" product. The number of days allotted for completion of the ITR will be jointly determined and agreed upon by EPA and USACE based upon the size and nature of the document to be reviewed, but shall be no less than 45 calendar days for any review.
- 2.5 The USACE HTR will focus exclusively on the scientific and technical aspects of the documents and whether the scientific and technical components have been applied in a sound manner to meet established regulatory requirements. It will not address grammatical, editorial, or formatting aspects of the document.
- 2.6 The USACE ITR team shall participate in one technical meeting with EPA and the RPs for each of the documents reviewed. The purpose of these meetings will be to provide clarification on any comments. These meetings will be conducted in the St. Louis area. If not able to be accomplished via an in-person meeting, the meeting shall be accomplished by phone and internet (Web Meeting).
- 2.7 EPA shall furnish USACE with the following:
 - 2.7.1 Background documents, data, and other information necessary to ensure the ITR's completeness:

- 2.7.2 Notification, at least 30 days in advance, of submittal of a document for review
- 2.7.3 A tentative schedule identifying anticipated document submittal dates, review times, and meetings:

TASK 3 COMMUNITY RELATIONS SUPPORT

This task includes efforts related to community relations support to EPA. Activities required under this task include the following:

- 3.1 Upon issuance of this IA, USACE shall attend two community meetings to inform the public of USACE's support to EPA under this IA and answer questions. For the initial public meeting after IA release, USACE will prepare a Power Point presentation or other visual aids, as required to communicate the ITR process to the public. For the second public meeting after the IA release, USACE shall attend to answer any remaining public questions regarding the IA scope.
- Upon completion of the review of each document, USACE staff shall attend a community meeting and present a description of the work accomplished by USACE and the findings of the ITR. The presentation will be provided via Power Point, or via other means, if required. An electronic file of the PowerPoint presentation shall be furnished to EPA at the meeting. USACE shall furnish 50 paper copies of the PowerPoint presentation for distribution to the public.
- 3.3 USACE staff shall be available to participate in pre- and post-meeting public availability sessions for the meetings at which the USACE reviews are presented. USACE shall provide necessary public availability session displays and information packets (up to 50 handouts of Power Point presentation).
- 3.4 EPA, as lead agency, shall be the central point of contact for all project stakeholders. If requested by EPA, USACE shall provide written responses to written questions received by EPA from the community regarding USACE's scope of work for the ITR effort.

TASK 4 WORK ASSIGNMENT CLOSE-OUT

This task includes efforts related to work assignment close-out. Activities required under this task include the following:

4.1 Upon notification by EPA, the USACE shall begin all internal procedures necessary to close out the work assignment including any file duplication, distribution, storage, or archiving per the contract requirements.

4.2 The USACE shall return documents identified to EPA or other document repositories as directed.

IV. WORK ASSIGNMENT PERIOD OF PERFORMANCE

August 1, 2014 to December 30, 2016

V. STATUTORY AUTHORITY

The statutory authority for entering into this IA is Section 105(a)(4) of the Comprehensive Environmental Response, Compensation, and Liability Act (CERCLA) of 1980 (42 U.S.C. 9601 et seq., Public Law 96-510, December 11, 1980), as amended by the Superfund Amendments and Reauthorization Act (SARA) of 1986 (Public Law 99-499, October 17, 1986), and Executive Order 12580.

VI. SCHEDULE OF DELIVERABLES/MILESTONES

TASK DELIVERABLE	SUBMITTAL SCHEDULE
1.3.2 Monthly Reports/Invoices	Throughout period
2.2 ITR Reports	Per agreed upon schedule

VII. EPA CONTACTS

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